

What is claimed is:

1. A surgical microscope comprising:

a viewing unit for viewing an object;

an image projection module for inputting image data into
said viewing unit;

5 said image projection module including an image display unit
for displaying said image data; and,

said image projection module including a plano-convex lens
and a plano-concave lens mounted downstream of said image display
unit.

2. The surgical microscope of claim 1, wherein said plano-convex
lens has a first focal length and said plano-concave lens has a
second focal length; and, the ratio of said first focal length
and said second focal length lies within a range from 1.9 to 2.5.

3. The surgical microscope of claim 1, wherein said viewing unit
defines a viewing beam path; and, said image projection module
includes a beam splitter mounted in said viewing beam path.

4. The surgical microscope of claim 3, wherein said plano-convex
lens is a first plano-convex lens; said image projection unit
further including a concave-convex lens and a second plano-convex
lens; said first plano-convex lens, said plano-concave lens, said
5 concave-convex lens and said second plano-convex lens all being
arranged between said image display unit and said beam splitter.

5. A surgical microscope comprising:

a viewing unit for viewing an object and said viewing unit

defining a viewing beam path:

an image projection module for inputting image data into
5 said viewing unit;

said image projection module including an image display unit
for displaying said image data;

an image recording module for recording an image of said
object supplied by said viewing unit; and,

10 said image recording module including:

an image sensor mounted to receive said image data from said
image projection module;

an image recording beam splitter mounted in said viewing
beam path for directing said image of the object onto said image
15 sensor; and,

a recording device connected to said image sensor for
recording said image data and said image of said object.

6. The surgical microscope of claim 5, wherein said image
projection module is disposed in said viewing beam path between
said image recording beam splitter and said object.

7. The surgical microscope of claim 5, wherein said recording
device includes an image mixer for mixing image data and said
image of said object.

8. A surgical microscope comprising:

a viewing unit for viewing an object and said viewing unit
defining a viewing beam path:

an image projection module for inputting image data into
5 said viewing unit;

said image projection module including an image display unit

for displaying said image data;

said image display unit including a reflection display illuminated sequentially with different colors as a function of time.

10

9. The surgical microscope of claim 8, wherein said image display unit includes a rotatably mounted filter wheel for illuminating said reflection display; and, a device for synchronizing the rotation of said filter wheel with the clock ratio of said reflection display.

5

10. The surgical microscope of claim 10, wherein the brightness of said image display unit is increased by providing a time-dependent sequential illumination of said reflection display with only a single color.

11. A surgical microscope comprising:

a viewing unit for viewing an object;

an image projection module for inputting image data into said viewing unit;

5

said image projection module including an image display unit for displaying said image data;

said viewing unit defining a viewing beam path;

an optical device mounted in said viewing beam path for providing an image of said object to a location outside of said viewing beam path;

10

an image recording module for recording an image of said object supplied by said viewing unit; and,

said image recording module including:

an image sensor mounted to receive said image data from said

15 image projection module;

an image recording beam splitter mounted outside of said viewing beam path for directing said image of the object onto said image sensor; and,

a recording device connected to said image sensor for

recording said image data and said image of said object.